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LAW OFFICES
HALEY, BADER & POTTS
4350 NORTH FAIRFAX DR., SUITE 900
ARLINGTON, VIRGINIA 22203-1633
TELEPHONE (703) 841-0606
FAX (703) 841-2345

POST OFFICE BOX 19006
WASHINGTON, D.C. 20036-9006
TELEPHONE
(202) 331-0606

JAMES E. DUNSTAN
ADMITTED IN D.C. AND VIRGINIA

OUR FILE NO.
1049-101-63

July 29, 1993

Mr. William F. Caton, Acting Secretary
Federal Communications Commission
Washington, D.C. 20554

Re: PR Docket No. 93-61, RM-8013
Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems

Dear Mr. Caton:

Enclosed on behalf of RADIAN CORPORATION is its **"REPLY COMMENTS"** in the above-referenced proceeding. Enclosed is an original and seven copies, a copy for each Commissioner.

If there are any questions concerning this matter, please communicate directly with this office.

Respectfully submitted,

RADIAN CORPORATION

James E. Dunstan
Susan H. Rosenau

Its Attorneys

JED/cap

Enclosures

No. of Copies rec'd 0+4
List A B C D E

Before The

Federal Communications Commission

Washington, D.C. 20554

In The Matter Of	)	
	)	
Amendment of Part 90 of the	)	PR Docket No. 93-61
Commission's Rules to Adopt	)	RM-8013
Regulations for Automatic	)	
Vehicle Monitoring Systems	)	

TO: The Commission

[redacted]

comments as to whether frequencies in the 902-928 MHz band should be allocated for Wind Profilers.

Radian's interest in this proceeding is focused on whether the FCC can make a permanent allocation for LMS operations in the 902-928 band in conjunction with the pending Notice of Inquiry in ET Docket 93-59 ("Wind Profiler NOI"). Radian continues to believe that both allocations should be made, and believes the comments of major parties support allocating spectrum in the 900 MHz band both to LMS systems and Wind Profilers.

II. AMTECH'S COMMENTS SUPPORT RADIAN'S CLAIMS THAT 915 MHz WIND PROFILERS CAN CO-EXIST IN THE BAND WITH LMS OPERATORS

The overriding theme of AMTECH's Comments is that LMS providers, wideband (or "wide-area", as AMTECH calls them) and narrowband (or "local-area" as AMTECH calls them) can share the spectrum in the 902-928 MHz band with existing users. "The centerpiece of this regime, like the current interim rules, is spectrum sharing." AMTECH Comments, p. 6. AMTECH even states that such sharing can be accomplished with the other existing users of the band, including future proposed users of the band. "[I]n any new LMS regime, maximum flexibility will be necessary for the optimal location of local-area systems given the multi-layered use of the 902-928 MHz band." Id. at 23, & n.45 (referencing ET Docket 93-59's proposal to allocate spectrum centered at 915 MHz for Wind Profilers).

AMTECH spends the majority of its comments in demonstrating that the band can be shared such that segregating wide-area and local-area systems into separate sub-bands would not be necessary, as proposed in the NPRM.

> Contrary to the preliminary impression of the FCC as set forth in the NPRM, the co-existence of wide-area and local-area systems is quite feasible and practical. Local-area AVM operations generally occur over a very small area and occur at relatively low power and low antenna heights (often with antennas directed downward).

Id. at p. 20. AMTECH states that with over 400 units installed, including Houston, Texas, it has received no interference from other users in the 902-928 MHz band. AMTECH Comments, Attachment A, pp. 5-6.

This can be accomplished, according to AMTECH, by licensees working together to make their systems as robust as possible, and eliminating instances of interference through site placement or technical means, such as the use of notch filters. AMTECH Comments, p. 34. "Accordingly, LMS licenses should be granted and renewed with the express understanding that licensees are required to cooperate in good faith to resolve situations of harmful interference." Id. at p. 22.

Radian agrees completely with AMTECH's approach in this proceeding. Radian is confident that all users in the 902-928 band (and Radian has been a user in the band on an experimental basis since 1989, including a site in Houston, Texas), can work together to share the spectrum efficiently and equitably. Radian does not comment on the specific counter-proposals of AMTECH to allow sharing of the entire band between wide-area and local-area systems, but would note that if

AMTECH can operate in the same sub-band and vicinity of high-power wideband systems with effective radiated powers (ERPs) of 5000 watts in a horizontal orientation, then AMTECH certainly will be able to operate in the vicinity of 915 MHz Wind Profilers with 500 watts in a vertical orientation with integrated side-lobe suppression fences, as proposed by Radian.[1] In short, AMTECH has demonstrated what Radian has been saying all along -- that with little burden, the 902-928 MHz band can accommodate a number of different users, including 915 MHz Wind Profilers.

III. RADIAN SUPPORTS ARRL'S CALL FOR INTERFERENCE STUDIES BETWEEN USERS OF THE 902-928 MHz BAND

In its Comments in this proceeding, the American Radio Relay League ("ARRL") concludes that the Commission should make no permanent allocation for LMS until such time as proper studies have been made to determine the compatibility of an expanded LMS service and other users of the band, including 915 MHz Wind Profilers. ARRL Comments in PR Docket 93-61 at 14. Similarly, in the Wind Profiler proceeding, ARRL has called for further testing of the interference

[1] Radian is a bit curious, however, as to how AMTECH can make its argument to the Commission in this proceeding that no interference will be caused to its systems by 5000 watt wide-band LMS systems, yet argue in ET Docket 93-59 that significant interference may be caused to its system by 915 MHz Wind Profilers operating at one-tenth the power in a completely different direction. Radian is confident that AMTECH is genuine in its willingness to work with other users of the band, and will maintain that position once it receives its allocation. Otherwise, the Commission might be forced to look more closely into the veracity of the statements made by AMTECH in this proceeding.

potential in the band. ARRL Reply Comments in ET Docket No. 93-59, at 9.

Radian stands ready to participate in interference studies by and between the various users in the 902-928 MHz band. Radian supports ARRL's position, because Radian believes it can work with other users in the band to develop techniques to ensure that no interference will exist between Wind Profilers and other licensed users of the band. With significant "real world" data collected over a number of years operating 915 MHz Wind Profilers in the vicinity of AVM operations and amateurs, Radian is confident that the results of these studies will demonstrate that all of the proposed users can co-exist within this band.

Testing also would be extremely helpful in determining which channelization plan would result in the least congested operational environment from an interference standpoint: the channelization plan proposed in the NPRM (characterized by sub-band segregation), or the two alternatives proposed by AMTECH (characterized by sharing of the entire band by wide-area and local-area LMS systems). Radian stands ready to participate in reasonable testing plans suggested by the FCC or other 902-928 MHz users.

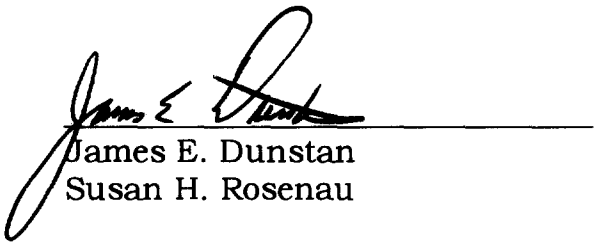
IV. CONCLUSION

For the foregoing reasons, and those incorporated by reference from Radian's Petition, Comments and Reply Comments filed in ET Docket No. 93-59, Radian respectfully urges the Commission to establish a frequency allocation plan that will maximize the use of the 902-928

MHz band between all users, LMS, amateurs, ISM, Part 15, and Wind Profilers.

Respectfully submitted,

Radian Corporation



James E. Dunstan
Susan H. Rosenau

HALEY, BADER & POTTS
Suite 900
4350 North Fairfax Drive
Arlington, VA 22203-1633
703/841-0606

July 29, 1993

CERTIFICATE OF SERVICE

I, Carol A. Park, an employee of Haley, Bader & Potts, hereby certify that on this 29th day of July, 1993, sent copies of the foregoing, "REPLY COMMENTS OF RADIAN CORPORATION," via first-class postage pre-paid mail to the following:

* Honorable James H. Quello, Acting Chairman
Federal Communications Commission
1919 M Street, N.W., Room 802
Washington, D.C. 20554

* Honorable Ervin S. Duggan, Commissioner
Federal Communications Commission